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Interpersonal Goals, Motivation, and Health-Promotion Behaviors

Undergraduate Research Thesis

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By

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Abstract

Research shows that people's behaviors, and specifically their lack of health engagement behaviors, contributes to about 50% of all illness (Ryan 2009). Why are individuals not engaging in these health behaviors that could prevent serious illness? From the social psychological perspective, motivation is shown to be more predictive of health outcomes compared to beliefs, support, or self-efficacy (Kelly et al., 1991). Building upon the egosystem-ecosystem theory of social motivation (Crocker et al., 2017), the current research examines the association among interpersonal goals, health motivations, and health-promotion behaviors. Study 1 utilized Amazon Mechanical Turk in order to outsource surveys to 309 participants ages 22 to 70 (M = 37.78 years old). Participants completed surveys measuring interpersonal goals, health motivations, and health behaviors. Results show positive associations between both compassionate and self-image goals with motivation on health-promotion behaviors. Study 2 was an experimental design utilizing 207 participants from the student research pool at a large university (M = 19.32 years old). This study used a manipulation of compassionate and self-image goals, in which participants were assigned to either a control condition or a condition of statements designed to increase one's self-image goals or compassionate goals. The manipulation preceded the same questions from Study 1 as well as measures relating to the participant's future willingness to engage in health-promotion behaviors. The results of Study 2 replicated the correlational results from Study 1, but regression analysis showed positive associations only between compassionate goals and motivation on health-promotion behavior. The current research suggests that interpersonal motivations affect people's health behaviors and subsequent health outcomes. These results are relevant for the health field as it can aid in the understanding of how interpersonal relationships may motivate individuals to increase engagement in health-promotion behaviors.

Interpersonal Goals, Motivations, and Health-Promotion Behaviors

Health related research is a highly important and relevant topic. Nearly 40 billion dollars are spent on medical and health related research each year in order to help people live a healthier life (Davio, 2017). However, this money and time spent on research may be wasted when people do not engage in important health related behaviors. Research shows that people's behaviors, and specifically their lack of health engagement behaviors, contributes to about fifty percent of all illness (Ryan, 2009). Why are individuals not engaging in these health behaviors that could prevent serious illness? From the social psychological perspective, the answer may lie in motivational factors. The strongest variable to consider when examining health-promotion behavior outcomes was found to be motivation, which was proven more predictive of behavior than beliefs, support, or self-efficacy (Kelly et al., 1991). Finding ways to motivate people to engage in these behaviors could cultivate a healthier society.

Previous research on health-promotion behaviors has focused primarily on examining *intrapersonal* motivations, which rely on a personal set of thoughts and beliefs about the self as a means of motivation (Weiner, 2001). For example, many theoretical frameworks studying health behaviors have included components of intrapersonal motivation as a strong factor, including the Protection Motivation Theory (Rogers & Prentice-Dunn, 1997), Model of Health Beliefs (Rosenstock, 1974), and an integrated model of the Revised Theory of Planned Behavior (Maddux, 1993). These theoretical models suggest that intrapersonal motivation can promote health behaviors. Empirical evidence also demonstrates the link between intrapersonal motivations and health behaviors. Buckworth et al. (2007) showed that both intrinsic and extrinsic motivations have effects on increased health-promotion behaviors, namely exercise. In addition, research examining

intrapersonal motivations components such as attitudes about personal health performance, self-efficacy expectancies, and perceived vulnerability to illness provided evidence that these motivation components predict health-promotion behaviors (Fisher et al., 2003; Melinda & Maddux, 1986).

However, the models of health based on intrapersonal motivations have limitations due to ill-defined concepts, such as the vague definitions for the components of motivation (Armitage & Conner, 2000; Sheeran and Orbell, 1998; Armitage & Conner, 2001). As well, motivations that rely on personal beliefs, or intrapersonal goals, are not always shown to have lasting effects on health-promotion and suggests that social support from others may be more successful (Kelly et al., 1991). This social support often happens in *interpersonal* relationships, where interpersonal goals are a present factor. However, little research has examined whether interpersonal goals and motivations affect health-promotion behaviors. As such, the current research aims to investigate interpersonal motivations and their effect on individual's health behaviors and subsequent outcomes.

Interpersonal goals are foundational for understanding how people relate to others in relationships. These goals reflect our motivations within relationships, and the desired objectives for a given relationship (Crocker & Canevello, 2012). Interpersonal goals can be broken down into two types of goals and motivational systems: self-image goals relating to egosystem motivation and compassionate goals relating to ecosystem motivations (Crocker & Canevello, 2012). Compassionate goals are often found in relationships with ecosystem perspectives and motivations, meaning a person cares about the well-being of others, without selfish intentions (Crocker & Canevello, 2008). Self-image goals, on the other hand, are shown to be associated with egosystem perspectives and motivations within relationships, where an individual is more concerned with their desired image, such as obtaining praise, accomplishments or recognition from others (Crocker & Canevello, 2008). Both of these goals and their attached motivational systems manifest in

interpersonal relationships and have been shown to affect an individual's relationship quality, wellbeing, and health (Crocker et al., 2017). Specifically, research has provided evidence that compassionate goals and other-focused motivations have positive effects on an individual's relationships as well as their personal health (Crocker et al., 2017). Oppositely, self-image goals and selfish motivations are related to negative consequences, such as poor physical and psychological health, as well as negative consequences within relationships (Crocker et al., 2017).

This research suggests that interpersonal motivations may play a significant role in health and behaviors. Therefore, the current study aims to demonstrate that other-focused, ecosystem motivations and self-focused, egosystem motivations can influence people's health-promotion behaviors. Specifically, this study proposes that focusing one's goals on compassion for the well-being of others can create long term effects on people's health-related behaviors. The current research expands on Dr. Jennifer Crocker's research on the costs and benefits of self versus other-focused motivations, specifically focusing on health behaviors and outcomes (Crocker et al., 2017). In this research, health-promotion behaviors are defined as any behavior that increases one's positive health outcomes (e.g. exercising, eating well-balanced meals, going to the doctor, etc.) (Ünalan et al., 2014). These health promotion behaviors are a crucial step in understanding how to motivate others to become healthier individuals. Moreover, this study seeks to examine how interpersonal goals may serve as motivation to engage in health-promotion behaviors.

This study proposes three different types of health motivations: compassionate health motivations, self-image health motivations, and standard health motivations. Compassionate health motivations are derived from the compassionate goals outlined previously and aim to capture a person's motivation for engaging in health-promotion behaviors based on their goals to care for the other people in their lives. Therefore, individuals with high compassionate goals are expected to

have higher compassionate health motivations, as these motivations are in line with the same goals. Similarly, self-image health motivations are derived from self-image goals, and aim to capture a person's motivation for performing health-promotion behaviors based on their goals to maintain their image. As well, individuals with high self-image goals are expected to have higher self-image motivations, as these motivations are in line with self-image goals. Standard health motivations are based on scales previously used to study health motivations and aim to capture the motivation of simple health-promotion (e.g. to feel healthy, to avoid illness, to prevent health issues, etc.), with no underlying interpersonal goals. Because these motivations are more general, there are no predictions of how these motivations may be related to interpersonal goals.

All of these motivations are expected to predict higher engagement in health-promotion behaviors. Specifically, the motivations based on the interpersonal goals of compassion and self-image are predicted to have similar outcomes on health-promotion behaviors. Individuals that indicate higher compassionate goals will feel motivated to engage in health behaviors because of their compassion for other's well-being. For example, an individual might feel compelled to be healthier in order to better support their loved ones. Similarly, individuals that indicate higher self-image goals will feel motivated to engage in health-promotion behaviors due to the desired images they want to portray to others. For example, an individual may feel motivated to be healthier in order to portray the image of a healthy person. Standard motivations based on the goal of becoming a healthier person are also predicted to increase health-promotion behaviors. An individual high in this goal will feel motivated as increasing these behaviors will directly impact their health. Therefore, these three types of motivations are predicted to promote health-promotion behaviors.

This study also predicts health behaviors to positively influence health outcomes. Previous research has shown that these health behaviors can impact a person's health outcomes (Musavian et

al., 2014). Health-promotion behaviors have become increasingly more relevant due to their effectiveness in improving health, and research suggests that health promotion should be implemented in policies worldwide (Kumar & Preetha, 2012). Therefore, I predict that health-promotion should predict positive health outcomes.

Overall, this research hypothesizes that compassionate goals predict higher levels of compassion focused and standard motivation related to health behaviors, which in turn lead to higher engagement in health-promotion behaviors and ultimately more positive health outcomes compared to self-image goals. These studies will test this hypothesis through two mediation models, one examining the effects of self-image goals on health behaviors through self-image and standard motivations, and the other examining the effects of compassionate goals on health behaviors through compassionate and standard motivations. This research does not predict how standard motivations may be related to interpersonal goals, however standard motivations are hypothesized to predict increased health-promotion behaviors. Health-promotion behaviors should then predict health outcomes as well.

Figure 1

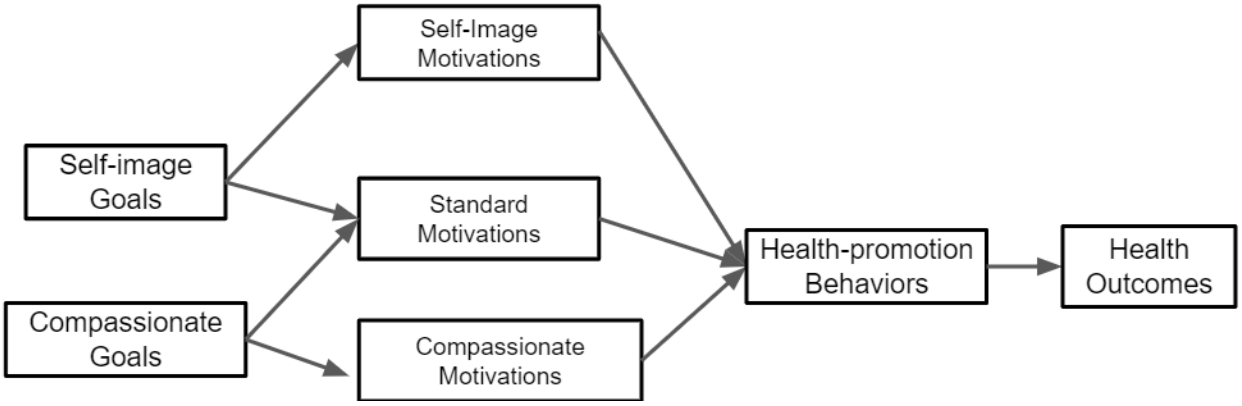

Figure 1 shows the hypothesized mediation pathway described above. Specifically, this study focuses on the relationship between compassionate goals and health-promotion behaviors through the mediator of compassionate motivations.

Study 1

Study 1 examined the associations among interpersonal goals, health motivations, health promotion behaviors, and physical health through a correlational design. In this study I sought to understand how interpersonal goals relate to people's current engagement in health promotion, and its subsequent relation to physical health. I predicted that self-image goals (i.e., goals to seek others' approval) would be associated with engagement in health behaviors, and thus positive health outcomes through the mediator of self-image motivations. As well, I predicted that compassionate goals (i.e., goals to care about others' well-being) would be associated with higher engagement in health behaviors and positive health outcomes, through the mediator of compassionate health motivations.

Method

Participants. Three hundred and nine Amazon Mechanical Turk worker participants completed a set of questionnaires in a single setting for monetary compensation. Fifty-four percent were male; participants ranged in age from 22 to 70 (M = 37.78 years, SD = 10.58). The sample was 81.6% White or Caucasian, 10% Black/African American, 6.5% Asian, less than 3% American Indian or Alaska Native, less than 1% Native Hawaiian or other Pacific Islander, and 1% "Other". Seven-point four percent of participants were Hispanic/ Latino(a).

Measures and procedure. In Study 1, participants were asked to report the "most important relationship in your life, right now" and provide the initials of that person. Of the participants, 67.3% thought of their romantic partner, 18.4% their friend, 9.4% their family member, 4.5% their child, and 0.3% other relationships. Participants completed measures of compassionate and self-image goals, general health, health-promotion behaviors, and health motivations. Measures relating to

interpersonal goals and motivations were directed toward the relationship partner reported. Participants also provided demographic information.

Compassionate goals. I assessed compassionate goals in Study 1 with an 8-item measure from Crocker and Canevello (2008). Items began with the phrase "In the past month, I wanted/tried to" and were rated on a scale ranging from 1 (not at all) to 5 (very much). The items included: "have compassion for (initials)' mistakes and weaknesses," "be supportive of (initials)," "avoid being selfish or self-centered," "be aware of the impact my behavior might have on (initials)' feelings," "make a positive difference in (initials)' lives," "avoid doing anything that would be harmful to (initials)," "be constructive in my comments to (initials)," and "avoid neglecting my relationship with (initials)." The scale had good internal consistency ($\alpha = .86$).

Self-Image goals. I assessed self-image goals in Study 1 with a 9-item measure from Crocker and Canevello (2008). Items began with the phrase "In the past month, I wanted/tried to" and were rated on a scale ranging from 1 (not at all) to 5 (very much). The nine items included: "avoid showing my weaknesses," "get (initials) to acknowledge my positive qualities," "avoid being blamed or criticized," "avoid revealing my shortcomings or vulnerabilities," "get (initials) to respect or admire me," "demonstrate my intelligence," "Demonstrate my positive qualities," "avoid coming across as unintelligent or incompetent," and "avoid appearing unattractive, unlovable, or undesirable." The scale had good internal consistency in the first sample ($\alpha = .88$).

Health Motivations were assessed through a 14-item scale developed for this study. The items each began with the phrase "personally, I made healthy choices (in the past month)" and was rated on a scale from 1 (not at all true) to 5 (extremely true). The 14 items were separated into three categories, standard, compassionate motivation and self-image motivation. The standard category included: "because I wanted to avoid ill-health", "because I hope to prevent health problems",

"because it will make me feel more healthy" and "because my doctor advised me". The compassionate motivations included: "because I want to set a healthy example for (initials)", "because it will help me live longer for (initials)", "because it will allow me to work so I can provide for (initials)", and "because I care about (initials)". The self-image motivations included: "because I compare my health with other people's", "because I want to show my worth to (initials)", "because I want to improve my appearance", "because it will help me look more attractive", and "because I cared about my body image". The internal consistency for the standard health motivations was good in this sample ($\alpha = .70$). The compassionate motivation scale had excellent internal consistency ($\alpha = .90$). The self-image motivation had a good internal consistency ($\alpha = .84$).

Wellness behavior inventory assessed health behaviors in Study 1 with a measure developed by Sirois (2001). Items began with the phrase "Please indicate approximately how often you perform the behaviors listed below. Think about how often you have done these things over the past month." and were rated on a scale ranging from 1-5 with the following: Less than once a week or never, one day a week, 2-3 days a week, 4-5 days a week, every day of the week. Sample items included: "Choose a diet low in fat, saturated fat, and cholesterol," "Get enough sleep," and "Follow a planned exercise program". The scale had good internal consistency in the first sample ($\alpha = .84$).

General Health was assessed through a shortened version of the SF-8 Health survey, developed by QualityMetric. Each item assessed participants' health in the past month and were rated from 1 (indicating poor health) to 5 (indicating very good health). The six items included: "Overall, how would you rate your health during the past month" rated from poor to very good, "During the past month, how much did physical health problems limit your usual physical activities (such as walking or climbing stairs)" rated on a scale from could not do physical activities to not at all, "during the past month, how much energy did you have" rated on a scale from none to very

much, “During the past month, how much difficulty did you have doing your daily work, both at home and away from home, because of your physical health” rated on a scale from could not do daily work to none at all and, “How much bodily pain have you had during the past month” rated on a scale from severe to none. This scale had good internal consistency in this sample ($\alpha = .87$).

Results

Table 1 shows the means, standard deviations, and correlations for all Study 1 variables. The correlation results show that people’s goals were associated with the corresponding type of motivation, as compassionate goals were significantly correlated with compassionate health motivations ($r = .23$, $p < .001$) and self-image goals were significantly correlated with self-image health motivation ($r = .51$, $p < .001$). The results also show positive and significant associations between each type of motivation (compassionate, self-image and standard health motivations) on health-promotion behaviors, confirming the hypothesis that motivations relate significantly to behaviors promoting health.

I tested whether this association remained when regressing each motivation on health-promotion behaviors at the same time, finding that the association between compassionate health motivation and health-promotion behaviors was no longer significant ($b = .05$, 95% CI = [-.02, .11], $\beta = .03$, $p = .131$). When controlling for compassionate goals and self-image goals within the same regression, the associations between the standard and self-image motivations with health-promotion behaviors remained significant ($b = .33$, 95% CI = [.23, .42], $\beta = .40$, $p < .001$; $b = .12$, 95% CI = [.03, .22], $\beta = .17$, $p = .011$, respectively), however compassionate motivation is approaching significant. When examining these mediation pathways using a Model 4 in PROCESS, the results

Table 1

Means, Standard Deviations, and Zero-Order Correlations for All Variables in Study 1

	1.	2.	3.	4.	5.	6.	7.	*M(SD)*
1. Compassionate goals	--							4.23(0.61)
2. Self-Image goals	.33**	--						3.27(0.83)
3. Health-promotion behaviors	.08	.13*	--					2.67(0.68)
4. Health Motivations- standard	.30**	.22**	.50**	--				3.54(0.82)
5. Health Motivations- Compassionate	.23**	.38**	.37**	.50**	--			2.87(1.28)
6. Health Motivations- Self-image	.05	.51**	.38**	.46**	.54**	--		2.98(0.97)
7. General Health	.09	-.09	.23**	.14*	.01	-.01	--	3.99(0.78)

$N = 309$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Figure 2

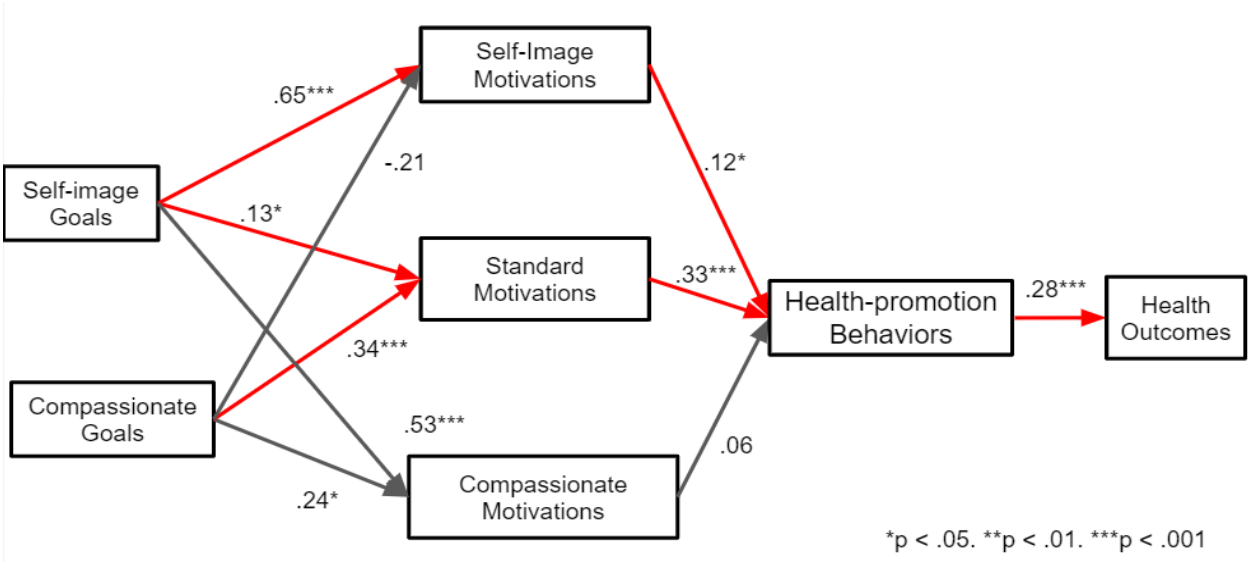

Figure 2 shows the resulting mediation model from Study 1, with the significant mediation pathways highlighted in red.

show a few significant pathways. Self-image goals had indirect effects on health-promotion behaviors through two separate mediators, self-image motivations (effect = .08, 95% CI [.02, .14]; see Figure 3) and standard health motivations (effect = .04, 95% CI [.01, .08]; see Figure 2). In addition, indirect effects of compassionate goals had an indirect effect on health-promotion behaviors through standard health motivations (effect = .11, 95% CI [.05, .18]; see Figure 2).

The results of Study 1 suggested that interpersonal goals do have an effect on health-promotion behaviors through the meditator of motivation. The correlational results reveal that there is an association between people's goals and the type of motivation for engaging health behaviors. The correlation also reveals that individual's motivations are also associated with health behaviors, which do in fact show higher levels of positive health outcomes. The mediation results confirm these correlation results and specify some of the pathways in which motivations mediate the relationship between interpersonal goals and health-promotion behaviors. Specifically, both standard motivations and self-image motivations mediate the relationship between self-image goals and health-promotion behaviors. As well, standard motivations mediate the relationships between compassionate goals and health-promotion behaviors. These results also confirm that health-promotion behaviors are associated with more positive health outcomes, through both the correlational and regression results. Although the results of standard motivations as the primary mediator in this study was unexpected, another study sought to test the hypothesis in a different setting and population.

Study 2

Study 2 examined the associations between interpersonal goals, health promotion behaviors, and health through an experimental design. In this study I sought to understand how interpersonal goals may influence people's future engagement in health promotion. Compassionate goals (e.g. concern for others' well-being) are predicted to be associated with higher future willingness to

engage in health behaviors, through the mediator of compassionate motivations. Self-image goals (e.g. seeking others' approval) are predicted to be associated with future willingness to engage in health behaviors, through the mediator of self-image motivations. As in Study 1, this study will be examining the three types of motivations (compassionate, self-image, and standard) as a mediator for engaging in health promotion behaviors. The same hypothesis model shown through Figure 1 will be examined in Study 2, with the exclusion of health outcomes, as this study examines future outcomes, which cannot be measured through a one-time survey. This study will also reexamine the standard motivation as a mediator for interpersonal goals and health behaviors within a new study design and sample.

Method

Participants. Two hundred and seven Introductory Psychology students at a large Midwestern university completed an experiment in a laboratory setting in partial fulfillment of a course requirement. Participants came into the lab, were welcomed by a researcher, and proceeded to complete the study in one sitting. Fifty one percent were male; participants ranged from 18 to 50 (M = 19.32 years, SD = 3.16). The sample was 69.6% White or Caucasian, 12.1% Black/African American, 19.8% Asian, less than 1% American Indian or Alaska Native, less than 1% Native Hawaiian or other Pacific Islander, and less than 2% "Other". Six-point three percent of participants were Hispanic/ Latino(a).

Measures and procedure. In Study 1, participants were asked to report the "most important relationship in your life, right now" and provide the initials of that person. Of the participants, 44.9% their family member, 27.5% their friend, 26.6% thought of their romantic partner, and 1% other relationships. A randomized manipulation of compassionate and self-image goals was included in

order to manipulate participants' interpersonal goals, based on the relationship reported. The manipulation of these interpersonal goals used true/false questions reworded from the compassionate and self-image goals scales. Examples from the compassionate goal condition included: “I never want or try to be supportive of (initials)”, “I never want or try to have compassion for (initial)'s mistakes and weaknesses”, and “I never want or try to make a positive difference in (initial)'s life”. Examples from the self-image goal condition included: “I never want or try to demonstrate my positive qualities to (initials)”, “I never want or try to get (initials) to recognize my positive qualities” and “I never want or try to get (initials) to respect or admire me”. For both conditions, participants are expected to answer false to these example questions, increasing their awareness of their goals in relationships. Therefore, answering questions in the compassionate goals condition, for example, would engage a participant to think about how compassionate they are in a relationship, increasing their compassionate goals. A control condition was also included in which some participants received no manipulation. After the manipulation, participants completed the same measures from Study 1.

Compassionate goals were assessed with the same measure from Crocker and Canevello (2008). All items were identical to those described in Study 1. However, as a way to check if the manipulation in this study affected participants’ goals, items began with the phrase “Right now, I want/try to” and were rated on a scale ranging from 1 (not at all) to 5 (very much). This measure had excellent internal consistency in the second sample ($\alpha = .92$).

Self-Image goals were assessed in Study 2 with the same measure from Crocker and Canevello (2008). All items were identical to those described in Study 1. However, as a way to check if the manipulation in this study affected participants' goals, items began with the phrase

"Right now, I want/try to" and were rated on a scale ranging from 1 (not at all) to 5 (very much). The second sample had excellent internal consistency (α = .90).

Health Motivations assessed health motivations in Study 2 through a 14-item scale developed for this study. All items were identical to those described in Study 1, although they began with the phrase "I will" in order to measure future behavior intention. The items each began with the phrase "indicate the frequency with which you want to engage in the following behaviors, based on your current motivations." and was rated on a scale from 1 (not at all true) to 5 (extremely true). The internal consistency for the standard health motivations was good (α =.72). The compassionate motivation scale had excellent internal consistency (α = .88). The self-image motivation had good internal consistency in Study 2 (α = .75).

Wellness behavior inventory assessed health-promotion behaviors in Study 2 with the measure adapted from Sirois (2001) for this study. Study 2 sought to examine future engagement, and therefore questions began with "I will". Four of the items in the scale used in Study 1 were removed as they were less relevant for the population in Study 2. Items that were removed included, "Inspect my body at least monthly for physical changes/danger signs", "Get a second opinion when I question my health care provider's advice", "Question health professionals in order to understand their instructions", and "Report any unusual signs or symptoms to a physician or other health professional". However, all other items remained identical to Study 1. The scale had good internal consistency in Study 2 (α = .72).

Results

Table 2 shows the means, standard deviations, and correlations for all Study 2 variables. I found that the manipulation in Study 2 had no significant effects. The ANOVA results show that the

manipulation conditions had no effect on participants' mean scores for health-promotion behaviors, $F(2, 204) = 1.47$, $p = .233$, as well as no effects on self-image goals $F(2, 203) = 0.71$, $p = .493$ or compassionate goals $F(2, 203) = .78$, $p = .461$. As our manipulation had no effects, the entire sample was used in the analyses.

The correlational results for Study 2 showed that interpersonal goals were associated with health motivations. However, Study 2 did not replicate the correlational effect of compassionate health motivation nor self-image health motivation with health-promotion behaviors. The only health motivation that is found to be significantly correlated with health-promotion behaviors in Study 2 is the standard health motivations ($r = .38$, $p < .001$).

The regression analysis of each motivation with health-promotion behaviors confirms this finding, showing only standard health motivations to be significant ($b = .36$, 95% CI = [.21, .51], $\beta = .39$, $p < .001$). When controlling for both compassionate goals and self-image goals, the regression results remain the same, with only standard health motivations showing significant results. When examining these mediation pathways using a Model 4 in PROCESS, the results show an indirect effect of compassionate goals on health-promotion behaviors through the mediator of standard health motivations, which partially supports the hypothesis that compassionate goals are associated with health-promotion behaviors (effect = .10, 95% CI [.04, .16]; see Figure 3).

The results of Study 2 also suggested that interpersonal goals do have an effect on health-promotion behaviors through the meditator of motivation. The correlation results confirm that interpersonal goals do affect motivations. However, the correlational results for Study 2 show an association between standard motivations and health-promotion behaviors, but no associations between self-image or compassionate motivations on health-promotion behaviors. The mediation

Table 2

Means, Standard Deviations, and Zero-Order Correlations for All Variables in Study 2

	1.	2.	3.	4.	5.	6.	*M(SD)*
1. Compassionate goals	--						5.67(1.03)
2. Self-Image goals	.62**	--					4.74(1.27)
3. Health-promotion behaviors	.12	.06	--				3.19(0.75)
4. Health Motivations- Standard	.40**	.33**	.38**	--			3.72(0.80)
5. Health Motivations- Compassionate	.47**	.41**	.12	.40**	--		2.60(1.20)
6. Health Motivations- Self-image	.40**	.45**	.06	.57**	.50**	--	3.42(0.89)

$N = 207$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Figure 3

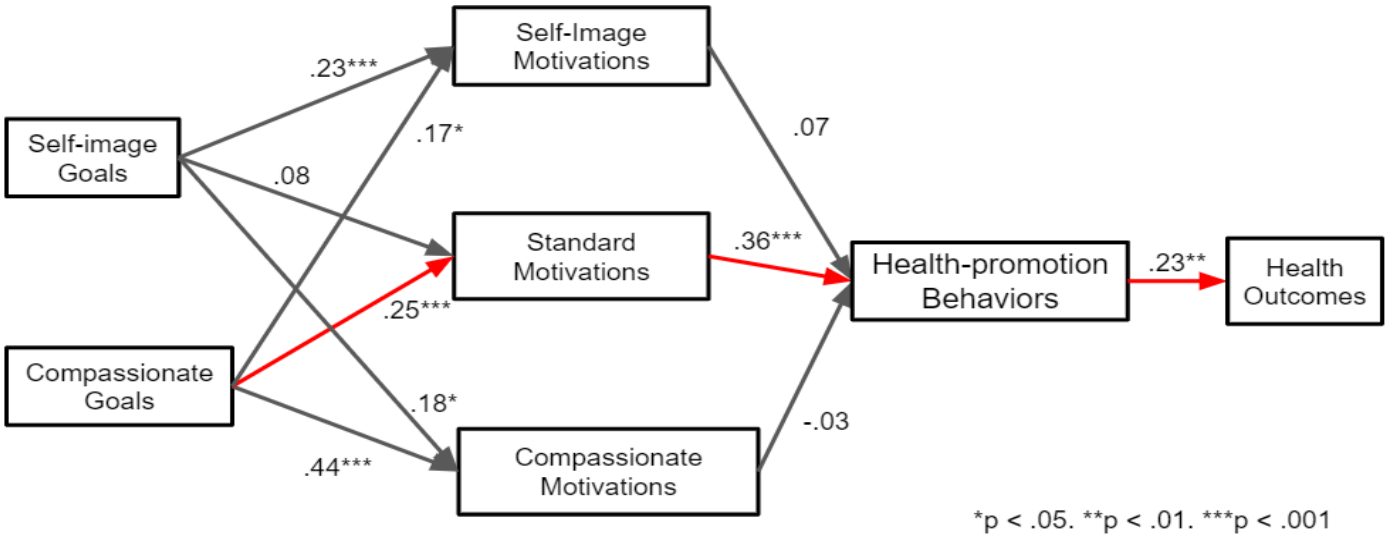

Figure 3 shows the resulting mediation model from Study 2, with the significant mediation pathways highlighted in red.

results confirm the correlational results of standard motivation as a mediator for compassionate goals and health-promotion behaviors. Specifically, the results show standard motivations as a mediator of compassionate goals on health-promotion behaviors. The results of Study 2 do not show any significant associations of self-image goals on health-promotion behaviors through any of the motivation pathways, suggesting that compassionate goals have stronger effects on health-promotion.

General Discussion

The results partially support the hypothesized model. In both tests of the mediation model, compassionate goals show significant indirect effects on health motivation as a mediator for health-promotion behaviors. These results suggest that individuals with high compassionate goals are more motivated to engage in health-promoting behaviors. As well, mediation results show no significant total effects or direct effects of self-image or compassionate goals on health-promotion behaviors in either study, which suggests that the link between interpersonal goals and health-promotion is completely mediated by motivations. However, there are some notable differences and contradictions to the hypothesis shown in the results when examining the significance of the mediation pathways. First, the first study's results showed significant associations between self-image motivations on health-promotion, but no significant associations for compassionate motivations on health-promotion behaviors. In fact, neither study shows an association between compassionate health motivations and health-promotion, and rather compassionate goals predict health-promotion behaviors through the mediator of standard motivation. This mediation result suggests that individuals high in compassionate goals are motivated to engage in health-promotion behaviors due to their standard motivations of promoting general health. Future research is necessary in order to confirm and clarify these results.

Implications

Although the results for these studies are not completely aligned with the initial hypothesis, this study does confirm the idea that interpersonal goals may relate to motivation for engagement in health-promotion behaviors. These findings provide important implications for the theoretical framework of health-behavior and motivation models. As discussed previously, prior research on motivation and health-promotion has focused primarily on intrapersonal motivations related to health. While research suggests clear benefits of intrapersonal motivations, there are also limitations to the previous health motivation models. The present studies provide evidence that interpersonal goals and motivations may be an effective way to continue to assist individuals to engage in health-promotion behaviors. Specifically, these results show the importance of compassionate goals within relationships, as these seem to have the strongest effects on health motivation and subsequent health behaviors in both of the studies.

The current research contributes to past literature on interpersonal goals, providing more evidence for how these goals can shape our behaviors. This study provides evidence that interpersonal goals are associated with higher levels of motivation for health behaviors, and motivation is shown to be a significant factor for continued engagement in health-promotion behaviors (Kelly et al., 1991). Based on these findings, future theoretical models for health motivation may benefit from including measures involving interpersonal goals and motivations. As well, research suggests that integrating interpersonal motivations and intrapersonal motivations into a single model may be more effective (Weiner, 2001). Future studies using the interpersonal motivations outlined in this study, as well as the intrapersonal motivations used in previous health-promotion studies, may be beneficial for creating more comprehensive health motivation models in the future.

These results have practical implications as well. This study's findings suggest that relationships may provide a way to motivate individuals to improve their health. This is extremely relevant for the health field, and what models of motivation health care professionals may use in the future, as previous models focus primarily on intrapersonal forms of motivation. Finding effective ways in which health professionals can motivate patients based on interpersonal goals could decrease the amount of disease that is caused by an individual's lack of engagement in health behaviors. This research could also provide insight and tools for individuals to better motivate themselves to engage in healthy behaviors and make healthy behavioral changes that will cause long-term health benefits. Age demographics were significantly different between studies, with a difference of almost 18 years between the mean ages in Study 1 versus Study 2. Although younger populations such as college students tend to have less health concerns compared to middle aged populations (Rustoen et al., 2005), the results of both studies showed similar associations between interpersonal goals and health-promotion behaviors. This suggests that these results are relevant for a large demographic of individuals. In general, understanding how an individual's goals within relationships may be affecting their motivations and behavior can provide valuable knowledge for individuals. Overall, understanding how individual's goals and motivations affect our health have strong implications for creating a healthier society.

Limitations

There are some limitations in the current research, which may account for the results shown in the data analysis. One limitation in this study lies in the manipulation used for interpersonal goals. Manipulating interpersonal goals has yet to be attempted, and therefore finding an effective way to manipulate self-image and compassionate goals posed a significant challenge in Study 2. The results

indicate that the manipulation used in Study 2 may have not been sensitive enough to significantly change an individual's goals, motivations, nor behaviors. This could be due to a possible confusion in how the questions in the manipulation were worded. When reviewing the participants' responses to the respective conditions, many participants did not answer in the intended manner in order for the goal to be manipulated. For example, in compassionate goal condition an example statement was “I never want or try to be supportive of others”, which we expected participants to answer false. However, data analysis revealed many people answered true to this statement, indicating possible issues with the statements and/or inattention from the participants. Even when examining the participants that did complete the manipulation in the intended manner, this manipulation still did not significantly affect participants goals, motivations, nor behaviors. Therefore, these findings suggest a structure issue within the manipulations used in Study 2.

Another limitation lies within the standard and compassionate motivation questions within the health motivation scale. When creating the standard health motivations, these questions were designed to not correlate heavily with either self-image or compassionate goals. Despite this, the results show these motivations have a higher significance in the mediation of interpersonal goals and health behaviors, both within the self-image and compassionate goals model. As well, both studies show that these standard health motivations are significantly associated with health-promotion behaviors, more so then self-image motivations and compassionate motivations. In fact, compassionate motivations showed no significant association in either study. This raises a significant issue, as compassionate motivations were the main focus of the hypothesis.

These limitations guide the future direction of this research by revealing possible areas for improvement in future studies. As mentioned, the two studies represent different age demographics, which may have affected the outcomes and difference in significance between the studies. Future

studies should attempt to capture a similar age demographic as Study 1 in order to ensure external reliability while using a more representative sample. Both of the studies also revealed a significant association between standard health motivations measure and health behaviors. This finding was unexpected, as these measures were not created with any underlying goals. Future studies are therefore needed to investigate possible underlying goals behind the standard health motivations and may utilize a change in the wording of motivation questions to make this construct more accurate. Another major limitation within Study 2 was the manipulation. The findings suggest that the manipulations were poorly constructed and not sensitive enough to influence individuals' goals, motivations, nor behaviors. Future studies will need to focus on creating a more sensitive and effective manipulation of interpersonal goals.

Conclusion

Interpersonal goals and motivations may affect an individual's health-promotion behaviors and resulting health outcomes. An individual who is high in interpersonal goals, especially compassionate goals based on caring for other's well-being, may feel more motivated to engage in health-promotion behaviors. These health-promotion behaviors can then translate to better health outcomes. Based on these findings, interpersonal relationships and the associated goals may be important in motivating individuals to engage in health-promotion behaviors that can help to prevent illness.

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